

Remarks

The present response is submitted in reply to the Final Office action issued on October 19, 2006. Claims 1-13, 15 and 16 are pending in this application. The Applicants wish to thank the Examiner for the withdrawal of the previous rejection of claim 15 under 35 U.S.C. 112, 2nd paragraph and 101, and the objection to claim 1. By the present response, claim 1 has been amended to clarify an informality, as discussed below. No new matter has been added. Reconsideration is respectfully requested in light of the amendments being made hereby and of the following remarks. In this respect, the term "is produced by polymerisation of" has been inserted to replace "can be produced by polymerisation of." It is submitted that this small change restricts the claim as the Applicants originally intended, and does not truly touch the merits of the application. If it is considered by the Examiner that it does touch the merits, it is submitted that the change only technically touches the merits, and that the amendment should be entered, in accordance with 37 C.F.R. 1.116(b)(2) – (an amendment presenting rejected claims in better form for consideration on appeal may be admitted), even though this response is to a Final Office action.

Rejection of claims 1-9, 12, 13, 15 and 16 under 35 U.S.C. 102(b)

Claims 1-9, 12, 13 and 16 have been rejected under 35 U.S.C. 102(b) as being anticipated by European Patent No. 0735122 A2 (Inagi, et al.) for the rationale set forth in the previous Office action. In particular, according to the Examiner, Inagi, et al. teach each and every feature of the present invention set forth in claims 1-9, 12, 13 and 16. Specifically, the Examiner states that Inagi, et al. disclose an adhesive base material comprising a polymer obtained by polymerizing a glucosloxy alkyl (meth) acrylate, a

hydroxyalkyl (meth)acrylate and a polyfunctional monomer. The Examiner also states that Inagi, et al. teach that the examples of hydroxyalkyl (meth)acrylate include 2-hydroxyethyl (meth) acrylate and hydroxypropyl (meth)acrylate, which are readable as component “a) – polar methacrylates” in present claim 1. The Examiner essentially goes on to argue that every limitation of claims 1-9, 12, 13 and 16 are disclosed by Inagi, et al. The Examiner also states, in reference to claim 1, that the wording “...composition which *can be produced* by polymerization...” does not exclude the usage of other components in the polymer composition.

Claim 15 has been rejected under 35 U.S.C. 102(b) as also being anticipated by Inagi, et al. In particular, the Examiner argues that Inagi, et al. disclose that the adhesive base material can also be used in a form deposited on a commercially available support and that illustrative usable examples include plastic sheets made of polyethylene, polypropylene, an ethylene-vinyl acetate copolymer, vinylon, a polyester, polyurethane, nylon or the like, non-woven fabrics made of rayon, a polyester or the like; and woven fabrics made a polyester, an acrylic resin, silk, cotton or the like (page 5, lines 39-42).

The Applicants respectfully disagree with the Examiner’s conclusion and submit that the present invention is patentably distinct from the invention disclosed in the Inagi, et al. reference. Moreover, the Applicants submit that each and every feature set forth in these claims is not taught or disclosed by the cited reference, and therefore the reference does not anticipate the present invention as set forth in claims 1-9, 12, 13, 15 and 16.

The Applicants submit that claim 1 has been amended to delete the recitation of “can be produced” in favor of the recitation “is produced.” It is respectfully submitted

that claim 1, as amended, clarifies that the polymer composition of the present invention consists only of the three groups of polymers as set forth in claim 1 and excludes the usage of other components in the polymer composition.

With reference to the Inagi, et al. patent, the Applicants submit that Inagi, et al. teach an adhesive base material comprising a polymer obtained by polymerization of (1) a glucosyloxy alkyl (meth)acrylate, (2) a hydroxyalkyl (meth)acrylate, (3) an alkyl (meth)acrylate and (4) a polyfunctional monomer. At page 2, line 54, Inagi, et al. states that the polymer with the desired properties of the invention thereof is obtained by polymerization of the aforementioned “specific four (emphasis added) monomers” (i.e., certain members of the characterized classes of monomers). In other words, the polymer according to Inagi, et al. is derived from at least four different monomers (emphasis added), one of those being a glucosyloxy (meth)acrylate, wherein the glucosyloxy group includes various monosaccharides and oligosaccharides with up to 10 saccharide units.

Contrary to the teaching of Inagi, et al., the polymer of the present invention is obtained by polymerizing (1) a polar (meth)acrylate with a Zerewitinoff hydrogen selected from the group consisting of mono-, bi- and polyepoxides, mono-, bi- and polyaziridines and melamine and its derivatives, or of a mixture of two or more of the aforementioned compounds, as defined in claim 1, (2) an apolar (meth)acrylate, and (3) a bi-, tri- or higher functional (meth)acrylate, or of a (poly)functional compound which is reactive to Zerewitinoff hydrogens and is selected from the group consisting of mono-, bi- and polyepoxides, mono-, bi- and polyaziridines and melamine and its derivatives, or of a mixture of two or more of the aforementioned compounds.

Pertaining to claim 1, part (c), the sum of the listed monomers adds up to 100%-wt., while only an initiator may optionally be added. The addition of polymers other than those listed above is precluded in the presently claimed invention by virtue of the amendment to claim 1, made herein. Hence, the polymer of the present invention is derived only from three different monomers set forth above and in claim 1, none of which is a glucosyloxy (meth)acrylate as set forth in Inagi, et al. Thus, the polymer as described in Inagi, et al. and the polymer of the present invention are not identical since the respective compositions are clearly different and, in turn, every feature of the composition of the polymer according to present claim 1 is clearly not taught and disclosed by Inagi, et al.

As noted in the previous Office action response, the Applicants further respectfully submit that this difference between the two compositions, which at first might only appear to consist of omitting one additional monomer, is in actuality a substantial difference when one compares the properties of the respective resulting polymers. The polymer of Inagi, et al. has excellent skin adhesion properties and swelling properties when impregnated with a solvent, i.e., a swelling rate of at least 300% (Inagi, et al. – page 2, lines 53, 54; page 5, line 12). The present polymer also has excellent adhesion, but in connection with polar and semi-polar substances, such as glass, metal and polycarbonate (paragraphs [00002] and [00003] of the present specification). Furthermore, the present invention is inert to chemical influences and moisture (paragraph [00008]) and does not swell, since swelling would result in cohesive failure or detachment of the adhesive from the surface (paragraph [00007]).

As noted above, the polymer of Inagi, et al. fails to teach each and every limitation of claim 1, as well as those of dependent claims 2-9, 12, 13 and 16, and therefore the reference fails to anticipate the presently claimed invention as forth in the independent claim 1 and the claims dependent therefrom. Regarding claim 15, which defines a use of the composition of claim 1 for the production of pressure sensitive adhesive tapes, the Applicants respectfully reiterate the arguments set forth above in connection with claim 1, and submit that the reference also fails to anticipate claim 15 for the reasons that it fails to anticipate independent claim 1. Withdrawal of the present rejection is respectfully requested.

Rejection of claims 10-11 and 15 under 35 U.S.C. 103(a)

Claims 10-11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inagi, et al. in view of U.S. Patent No. 6,713,641 (Weaver, et al.) for the rationale set forth in the previous Office action. In particular, according to the Examiner, Inagi, et al. teaches the limitations of claims 10-11, except for the (meth)acrylated polyesters being conversion products of OH-terminated polyesters polyols with (meth)acrylic acid or reaction products of carboxyl groups-containing polyester polyols with hydroxyl group-containing (meth)acrylates; and (meth)acrylated polyurethanes being conversion products of amine- or hydroxyl-terminated (meth)acrylates with diisocyanates or polyisocyanates.

The Examiner refers to Weaver, et al. which, the Examiner states, discloses a coating composition wherein the polymerizable vinyl compounds comprise a solution of a polymeric, polymerizable vinyl compound selected from acrylated and methacrylated polyesters, acrylated and methacrylated polyethers, acrylated and methacrylated epoxy

polymers, acrylated and methacrylated urethanes, and mixtures thereof, in a diluent selected from monomeric acrylate and methacrylate esters (claim 17; col. 25, lines 24-31).

The Examiner states that the acrylated and methacrylated polymers and oligomers typically are combined with monomers, which contain one or more acrylate or methacrylate groups, such as monomeric acrylate and methacrylate esters, and serve as reactive diluents. The Examiner still further argues that the unsaturated polyesters, which are prepared by standard polycondensation techniques known in the art, are most often combined with either styrene or other monomers, which contain one or more acrylate or methacrylate groups and serve as reactive diluents (col. 13, lines 9-17).

The Examiner concludes that it would have been obvious to one having ordinary skill in the art to incorporate acrylated and methacrylated polyesters and acrylated and methacrylated urethanes as taught by Weaver, et al. in Inagi, et al.'s pressure sensitive adhesive polymer composition because such combination with acrylate and methacrylate esters are suitable as adhesive and coating for such substrates as metals, aluminum, steel, plastics, glass, wood, paper and leather and would thus arrive at the subject matter of instant claims 10-11 and 15. The Examiner also argues that the cited prior art references are analogous art because they are from the same field of endeavor concerning coating and pressure sensitive adhesive polymer compositions.

The Applicants respectfully submit that to establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Third, the prior art reference (or references

when combined) must teach or suggest all of the claim limitation. The Applicants respectfully submit that one skilled in the art would have no suggestion or motivation to combine the aforementioned references in order to arrive at the present invention. Additionally, even if one skilled in the art were to consider Inagi, et al. alone, or in combination with Weaver, et al., each and every limitation of the present invention would not be disclosed, nor would there be a reasonable expectation of success if the aforementioned references were to be considered.

The Applicants respectfully disagree with the Examiner's opinion for at least the deficiencies of Inagi, et al., as discussed above. As noted above, Inagi, et al. fails to each and every limitation of the presently claimed invention. Moreover, the respective polymers differ in their respective properties. To reiterate, the polymer of Inagi, et al. has good swelling properties and excellent adhesion, preferably on the skin, and is intended to be used in medical applications. On the other hand, the polymer of the present invention is inert to moisture and chemical influences, has excellent adhesion on polar or semi polar surfaces (rather than on skin) and is intended to be used in technical applications, such as connecting glass, stone and the like.

Consequently, it is respectfully submitted that one skilled in the art would not have considered the disclosure of Inagi, et al. to arrive at the presently claimed invention since the teachings of Inagi, et al. concern a very different area of expertise and application. In other words, one skilled in the art would not have considered Inagi, et al.'s disclosure, which concerns a different area of expertise and application, to obtain polymers with the special characteristics as described in the present invention. Hence,

one of ordinary skill in the art would not have considered the Inagi, et al. disclosure as the closest prior art, especially since polymeric chemistry is generally based on empiric knowledge.

As the Inagi, et al. reference should clearly not be considered as prior art, one skilled in the art would have had no reason to combine the teachings of the disclosure therein with those of Weaver, et al. Furthermore, the combination of both disclosures would still lead to compositions containing glucosyloxy alkyl (meth)acrylate with properties that would likely resemble those of the composition disclosed by Inagi, et al. On the other hand, it would be questionable whether such proposed compositions would share characteristics such as those of the present invention.

In conclusion, it is respectfully submitted that one skilled in the art would not have considered combining ingredients of an adhesive, used in medical preparations, having good swelling properties and favorable adhesion to skin and a non-adhesive polymer coating for use in X-ray films to obtain a non-swelling, chemically inert adhesive with good adhesion to glass and the like, in particular when the exchange of a polymer component is required in addition to the removal of one specific monomer component in order to achieve the desired properties of the present invention. Therefore, it would not be clear to one skilled in the art to combine the teachings of the cited references in order to arrive at the present invention. Withdrawal of this rejection is strongly requested.

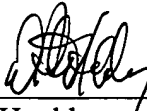
Conclusion

In light of the foregoing claims and arguments, it is believed that the present application is in condition for allowance, and such action is earnestly solicited. The

Examiner is invited to call the undersigned if there are any remaining issues to be discussed which could expedite the prosecution of the present application.

Respectfully submitted,

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